

IDC Internet Technologies

EX1 - Basics



- 1) This exercise equals 8% of the final grade. The grade is binary, either 100 or 0.
- 2) Learn HTML, CSS & JavaScript basics
 - a) Review carefully the following **JavaScript** tutorials:
 - i) <https://javascript.info/>
 - (1) Read 2.1-2.17
 - (2) Read 4.1-4.6
 - (3) Read 5.1-5.12
 - (4) Read 9.-9.3
 - (5) Read 10.1-10.2
 - (6) Read 11
 - (7) Read 13
 - b) Learn **HTML & CSS**:
 - i) <http://www.htmldog.com/guides/html/>
 - ii) <http://www.htmldog.com/guides/css/>
- 3) Use the filename **learn.js** to:
 - a) Develop a 'function expression' called '**qSyntax**'. It returns an object that consists of two keys:

- i) 'doSomething' : <function: has at least 100 lines of meaningful code; uses 15 different "syntaxes" you have learned in the tutorials (including async, Promise, for..of, class)
 - ii) 'desc' : <string: description of what doSomething() is doing and which "things" it utilizes>
- b) Develop an 'arrow-function expression' called '**qObj**'
 - i) Returns an object that consists of two keys:
 - (1) 'createObjects': <function that generates the same object in at least 5 different methods. It returns a Map where the key is the method name and the value is the generated object>
 - (2) 'chain' : <function: returns a prototype-chain that contains all the objects that were created by 'createObjects', it can contains additional objects as well>
 - (3) 'desc' : <string: description of what b.i.1,b.i.2 are doing>
- c) Develop a 'function **declaration**' called 'qCalc'
 - i) Returns an object (built via constructor) that consists of two keys:
 - (1) 'calcFactory' : <function: returns a **calculator** object that has 3 methods add(num), sub(num) getValue() and no other exposed keys>
 - (2) 'desc' : <string: description of what 'calcFactory'() is doing and how to use it>
- d) Develop a 'function declaration' called 'qAsync'
 - i) Returns an object (built via constructor) that consists of two keys:
 - (1) 'doAsync' <function: returns setTimeout function that can be used using async/await syntax>
 - (2) 'exec' : <function that uses the doAsync function to print something after 11.5 seconds>
 - (3) 'desc' : <string: description of what doAsync/exec() are doing and how to use it>
- 4) **Develop a *readme.html*** and add the following details there:
 - i) Your name & ID
 - ii) 3 funny pictures
 - iii) 2 things were easy/difficult in this ex in an HTML table
- 5) **Test your JavaScript(test learn.js):** Use an HTML file (test.html) that includes the learn.js script via a SCRIPT tag. Include additional SCRIPT (filename: test.js) which tests that qObj qCalc, qAsync are actually doing what they are supposed to be doing.
- 6) **How to submit:** Zip learn.js, test.js, test.html and the readme.html files (+other files if needed) into <yourID>.zip and **submit by May 20 23:55**
- 7) **Good luck**

